

Title (en)
BIDIRECTIONAL WIRELESS POWER TRANSMISSION SYSTEM

Title (de)
SYSTEM ZUR BIDIREKTIONALEN DRAHTLOSEN STROMÜBERTRAGUNG

Title (fr)
SYSTÈME DE TRANSMISSION D'ÉNERGIE SANS FIL BIDIRECTIONNEL

Publication
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Application
EP 18805580 A 20180523

Priority

- JP 2017104824 A 20170526
- JP 2018019865 W 20180523

Abstract (en)
A first power transfer circuit in a first power transfer apparatus 10 and a second power transfer circuit in a second power transfer apparatus 20 are configured so as to be electrically symmetrical to each other. In transfer of electric power from one of the first power transfer apparatus 10 and the second power transfer apparatus 20 to the other of the first power transfer apparatus 10 and the second power transfer apparatus 20, a controller drives a first switching circuit S1 and a second switching circuit S2 using a parallel resonant frequency f_0 of a complex resonant circuit as a reference frequency of an operating frequency. The controller changes the operating frequency to a frequency higher than the reference frequency or a frequency lower than the reference frequency if a duty ratio is maximized when transmitted electric power is lower than target electric power, which is a control target value, during the driving at the reference frequency.

IPC 8 full level
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CPC (source: EP US)
H02J 7/00 (2013.01 - US); **H02J 7/342** (2020.01 - EP); **H02J 50/05** (2016.02 - EP US); **H02J 50/12** (2016.02 - EP US)

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